

FIG. 1

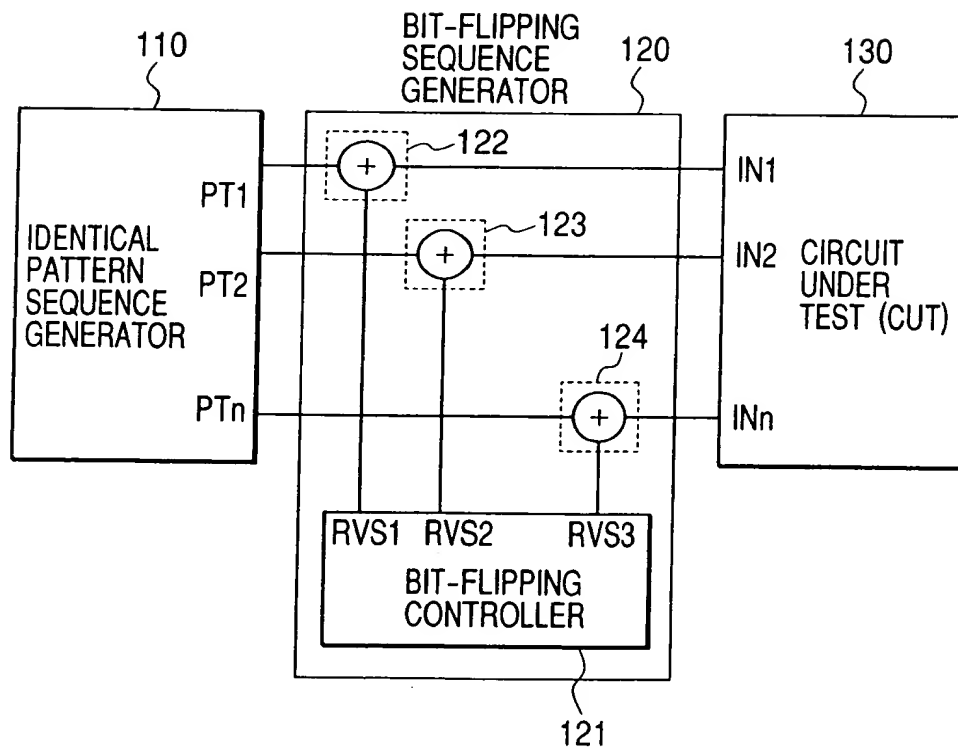


FIG. 2(a)

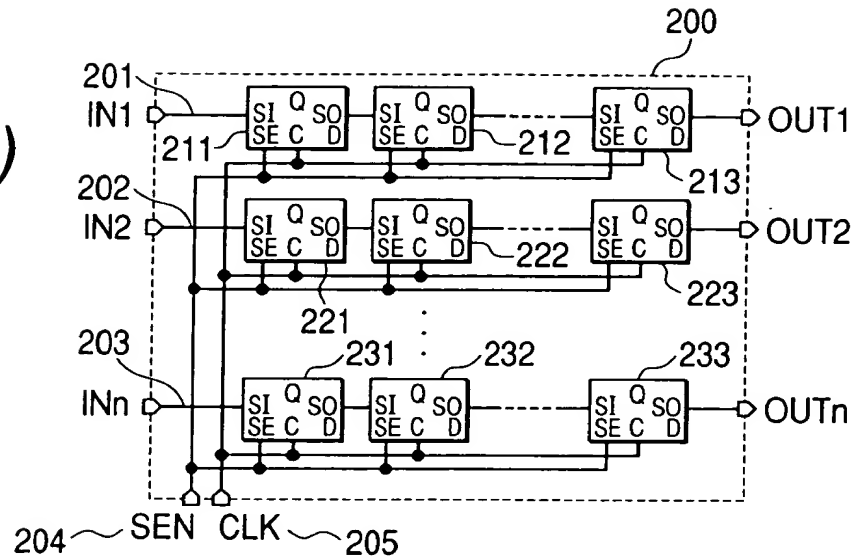


FIG. 2(b)

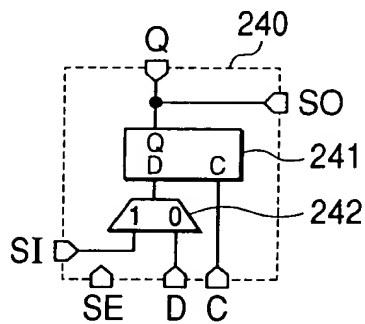


FIG. 2(c)

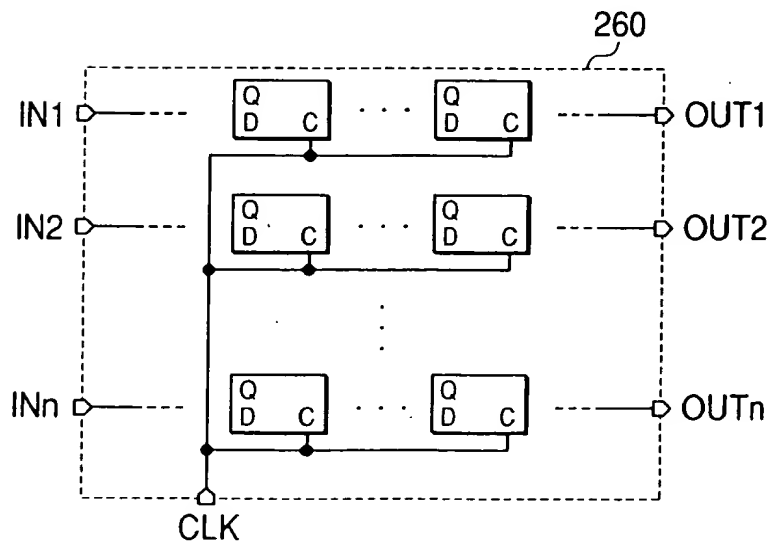


FIG. 4

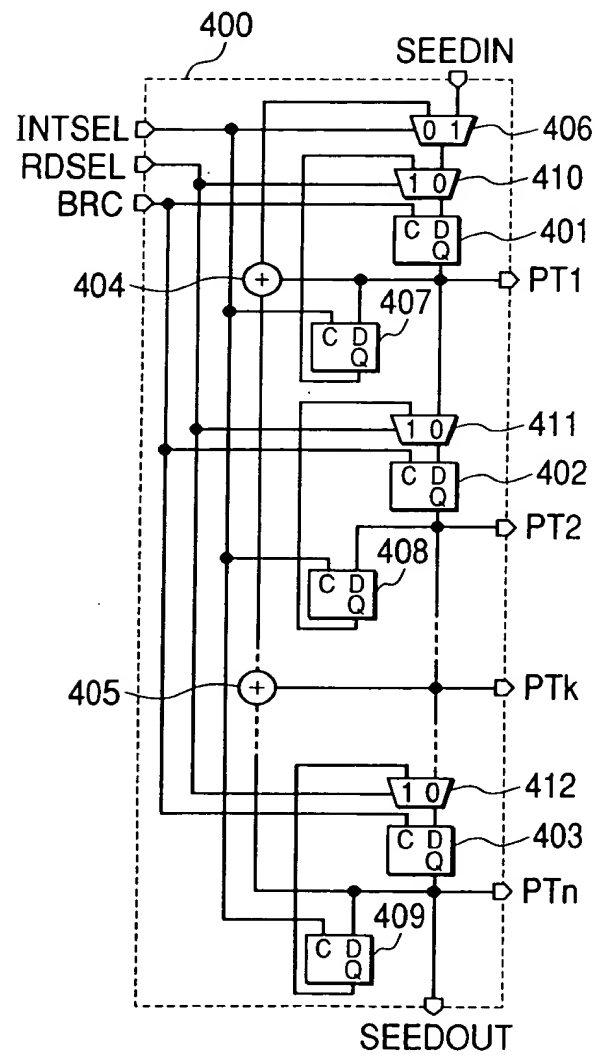


FIG. 5

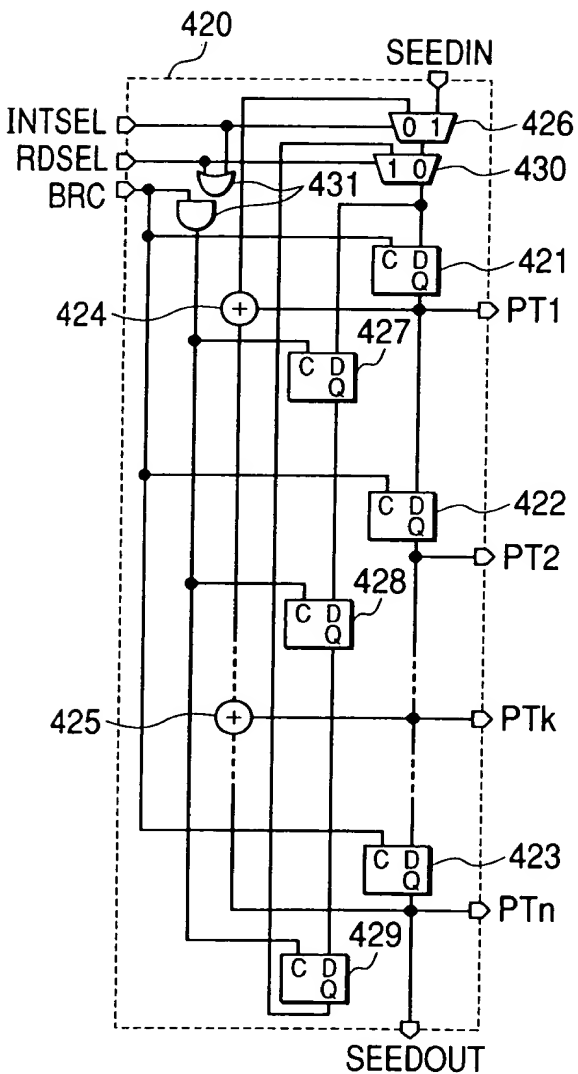


FIG. 6

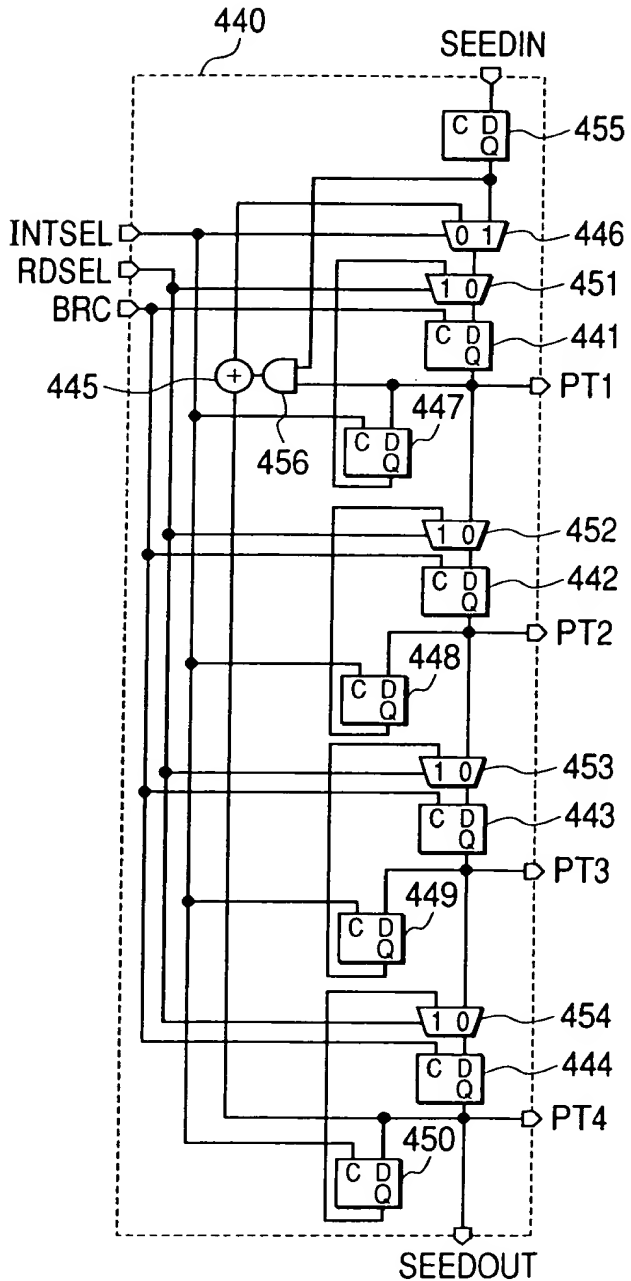


FIG. 7

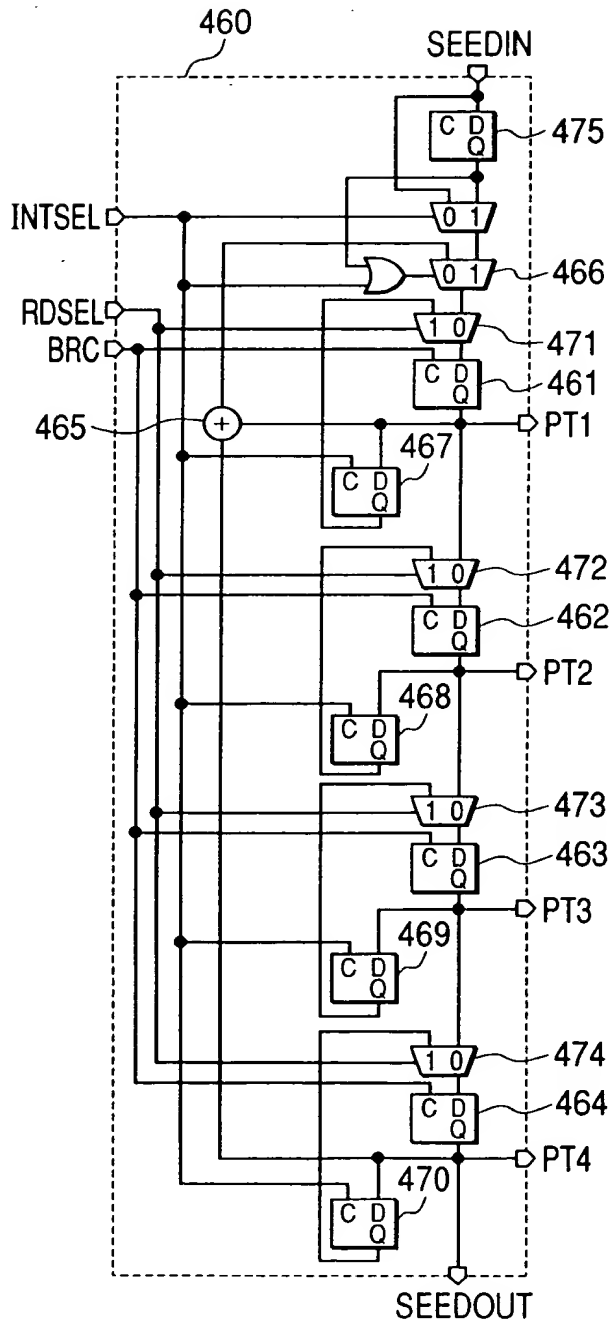


FIG. 8

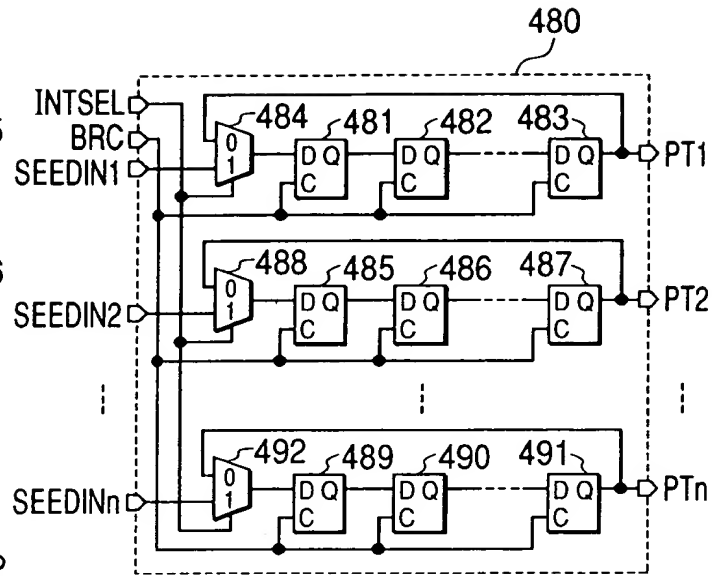


FIG. 9(a)



MODE	INTSEL	BRC	REGISTER
INITIALIZATION	1		SHIFT
PATTERN GENERATION	0		RANDOM

FIG. 9(b)




MODE	INTSEL	RDSEL	BRC	REGISTER	SEED BACKUP REGISTER
INITIALIZATION	1	0		SHIFT	SEED COPY
PATTERN GENERATION	0	0		RANDOM	HOLD
SEED RECOVERY	0	1		RECOVERY	HOLD
SEED UPDATE	1	0	—	—	SEED COPY

FIG. 9(c)




MODE	INTSEL	RDSEL	BRC	REGISTER	SEED BACKUP REGISTER
INITIALIZATION	1	0		SHIFT	SEED COPY
PATTERN GENERATION	0	0		RANDOM	HOLD
SEED RECOVERY	—	1		RECOVERY	HOLD

FIG. 10

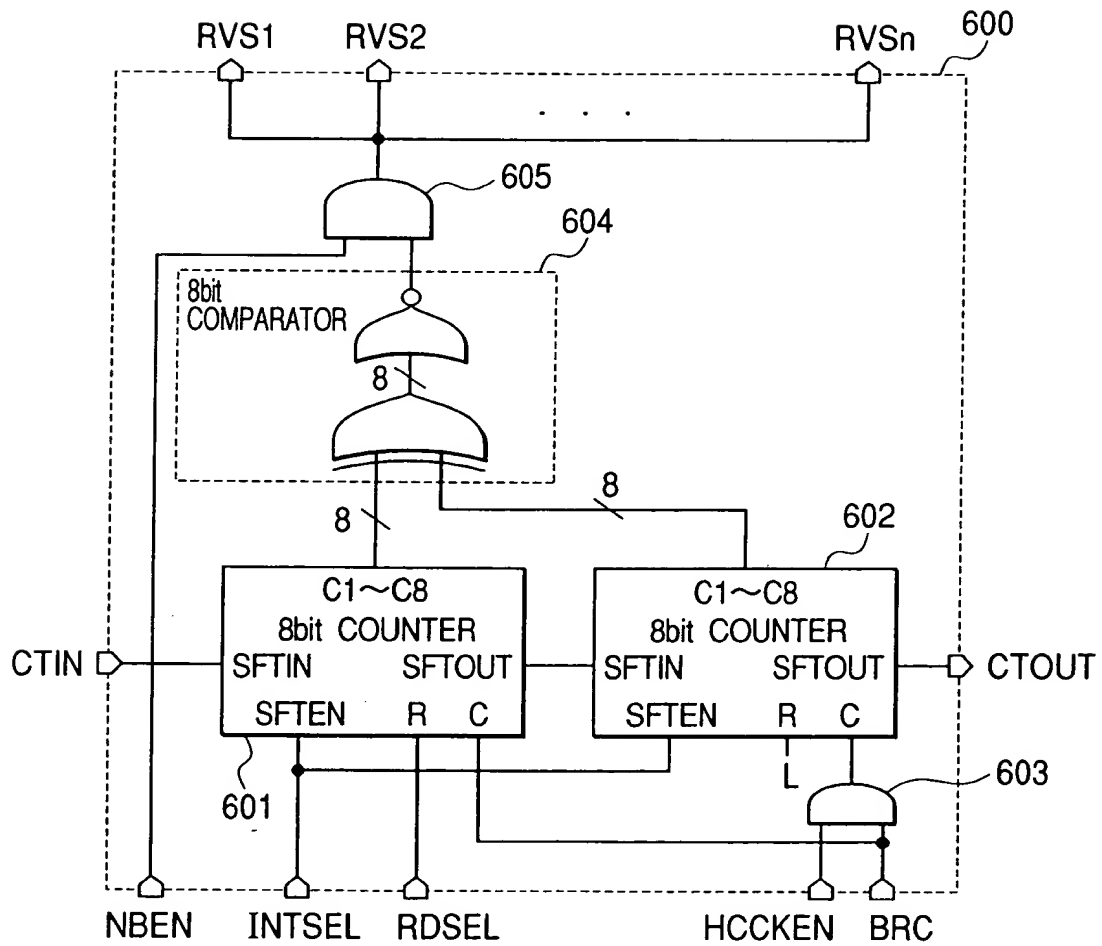


FIG. 11

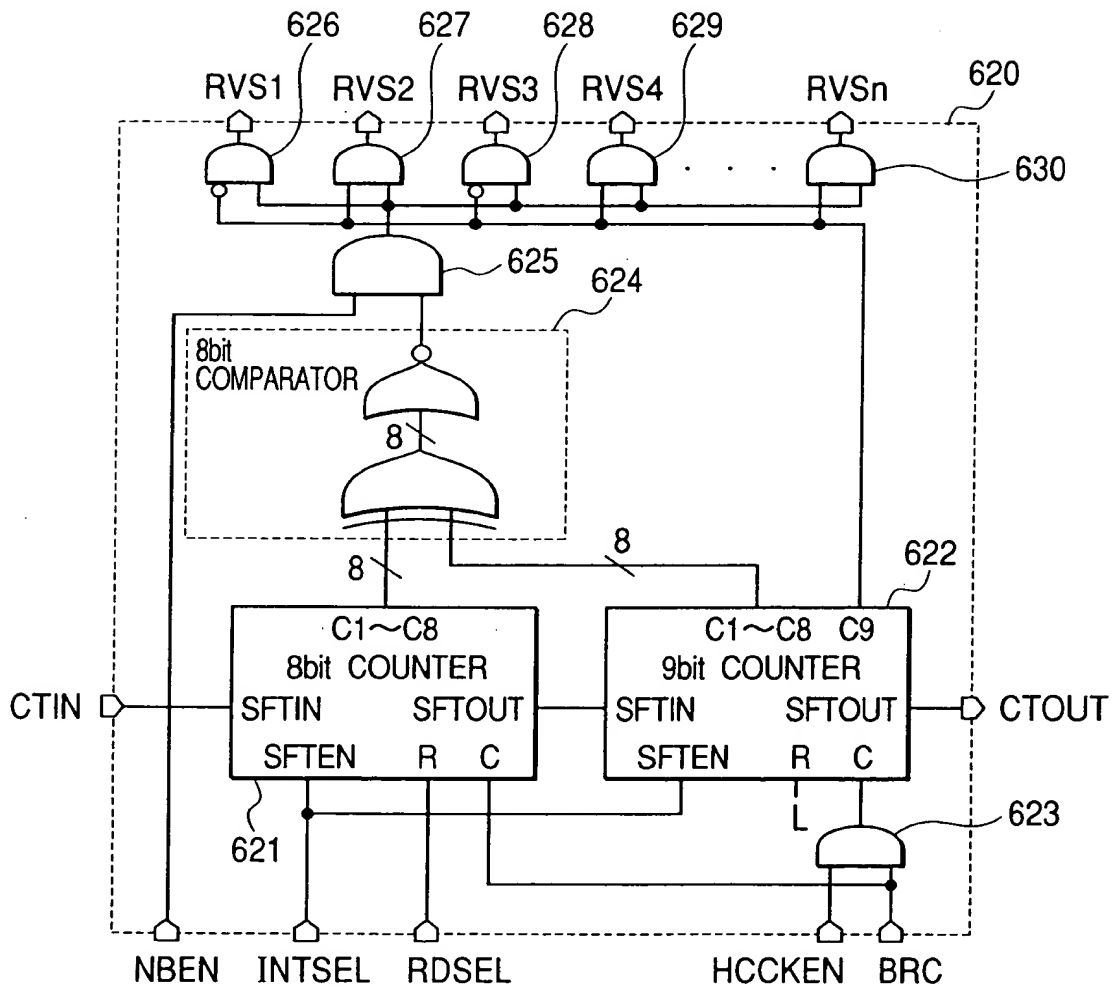


FIG. 13

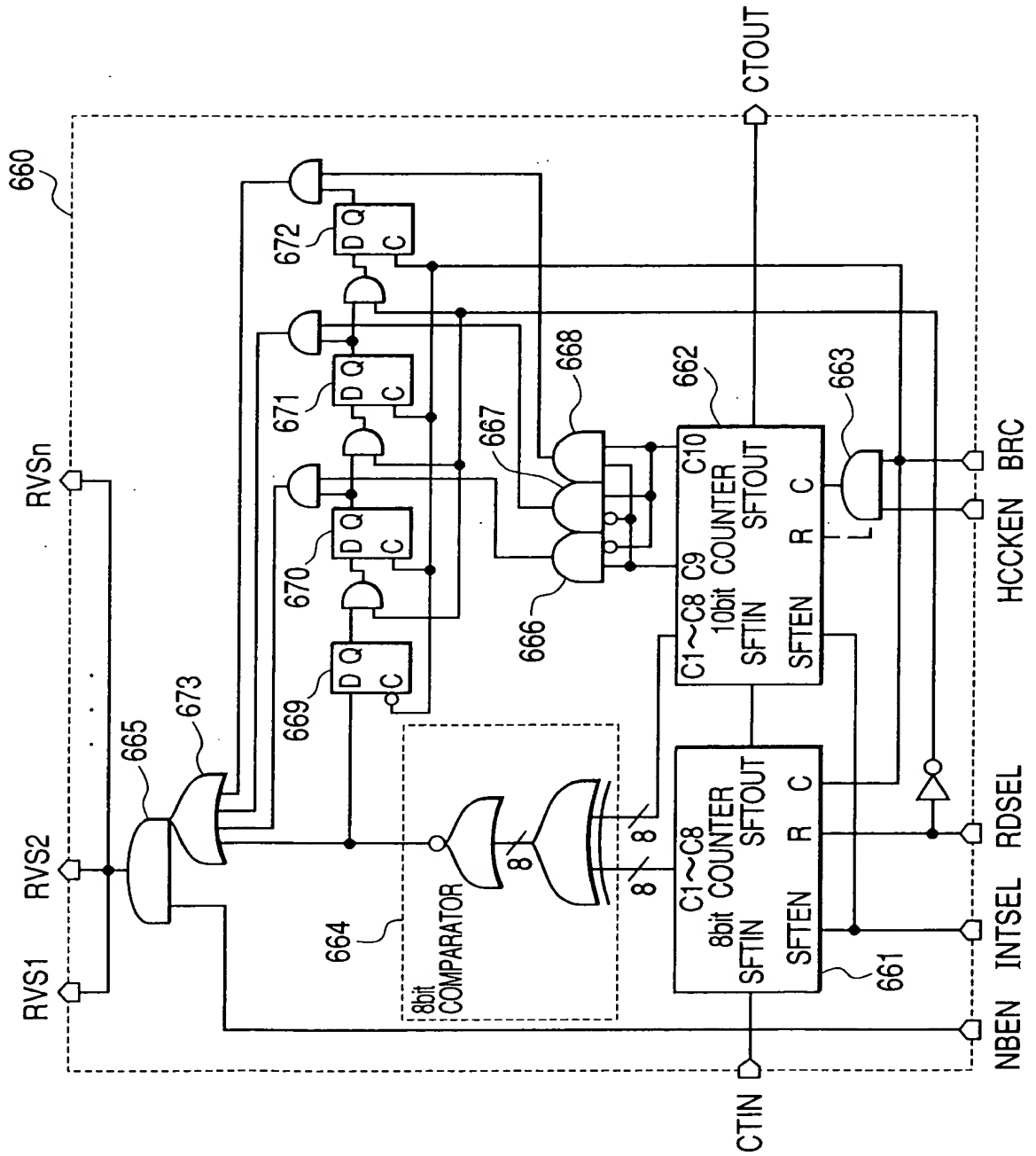


FIG. 14(a)

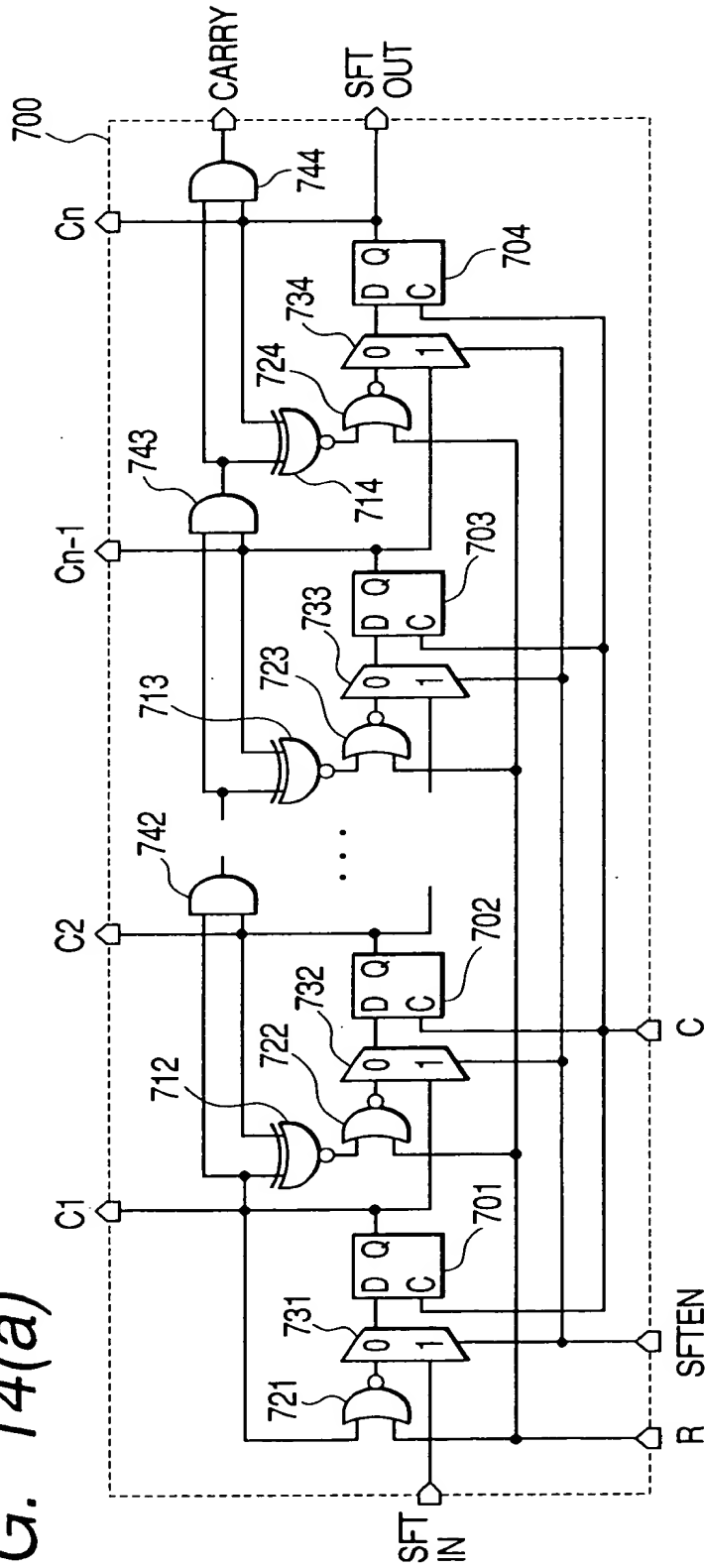


FIG. 14(b)

MODE	SFTEN	R	C
SHIFT	1	0	↑
RESET	0	1	↑
INCREMENT	0	0	↑

FIG. 15(a)

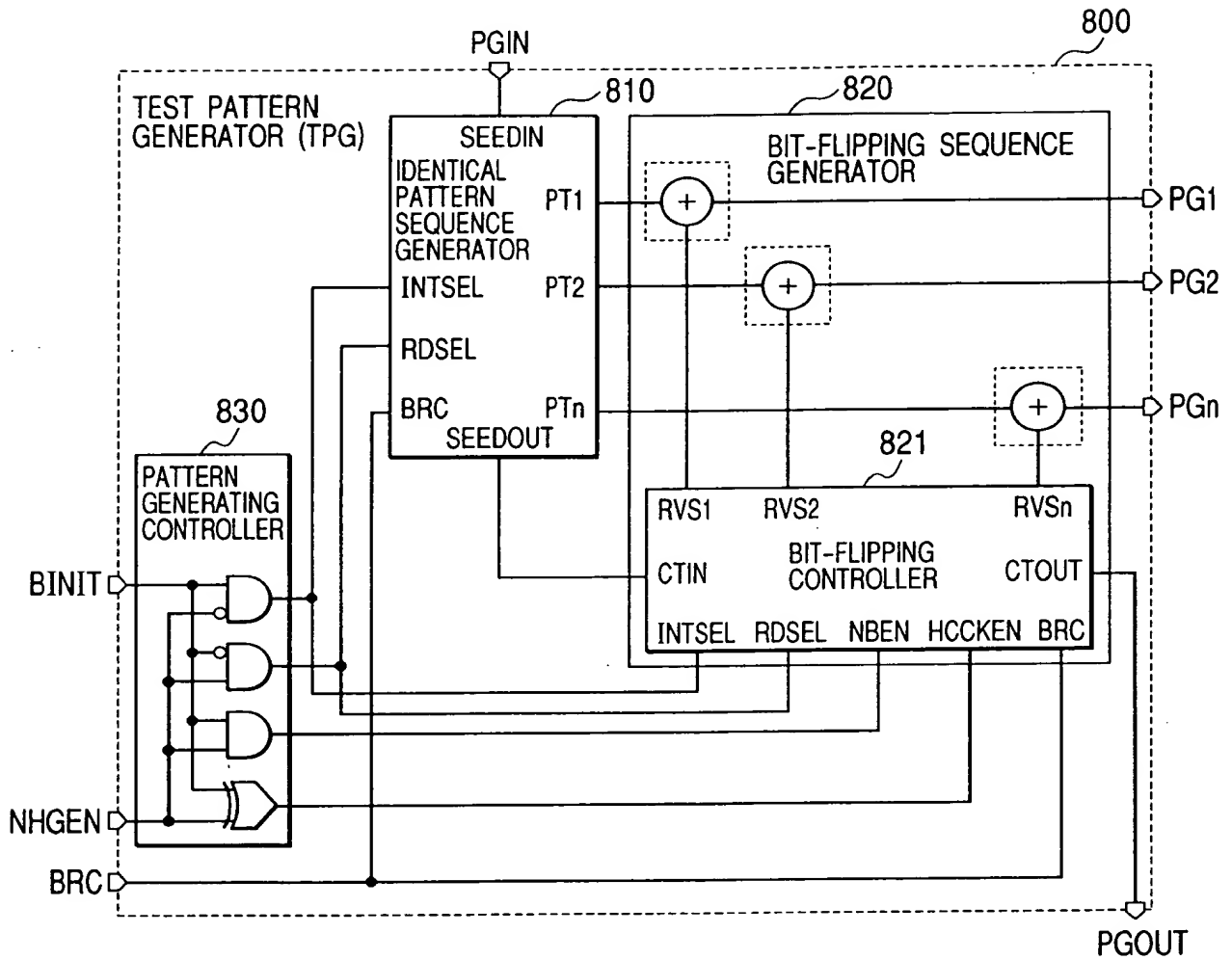


FIG. 15(b)

	MODE	BINIT	NHGEN	INTSEL	RDSEL	NBEN	HCCKEN
841	INITIALIZATION	1	0	1	0	0	1
842	PATTERN GENERATION	0	0	0	0	0	0
843	SEED RECOVERY	0	1	0	1	0	1
844	NEIGHBORHOOD PATTERN GENERATION	1	1	0	0	1	0

FIG. 16

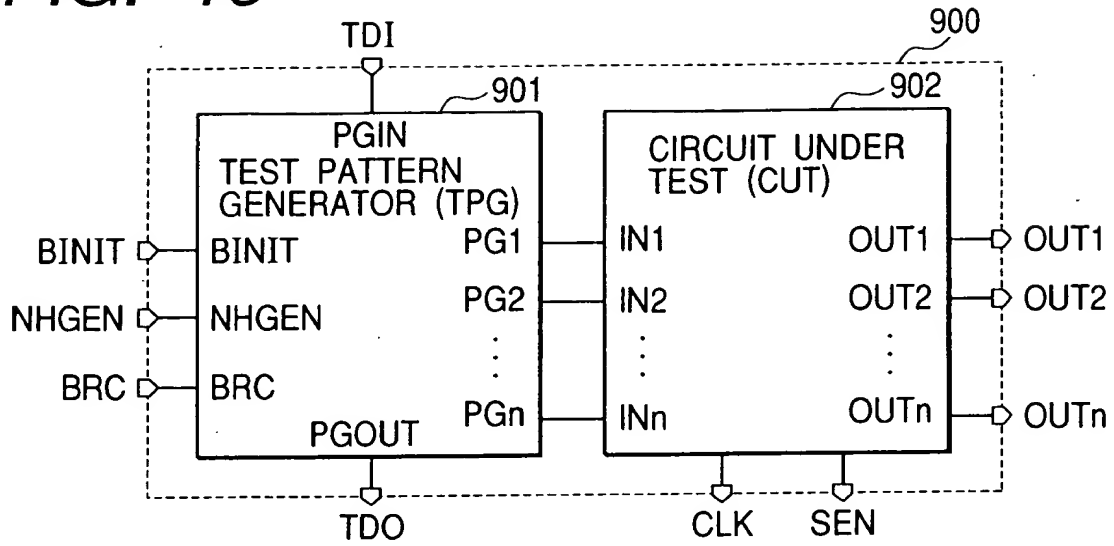


FIG. 17

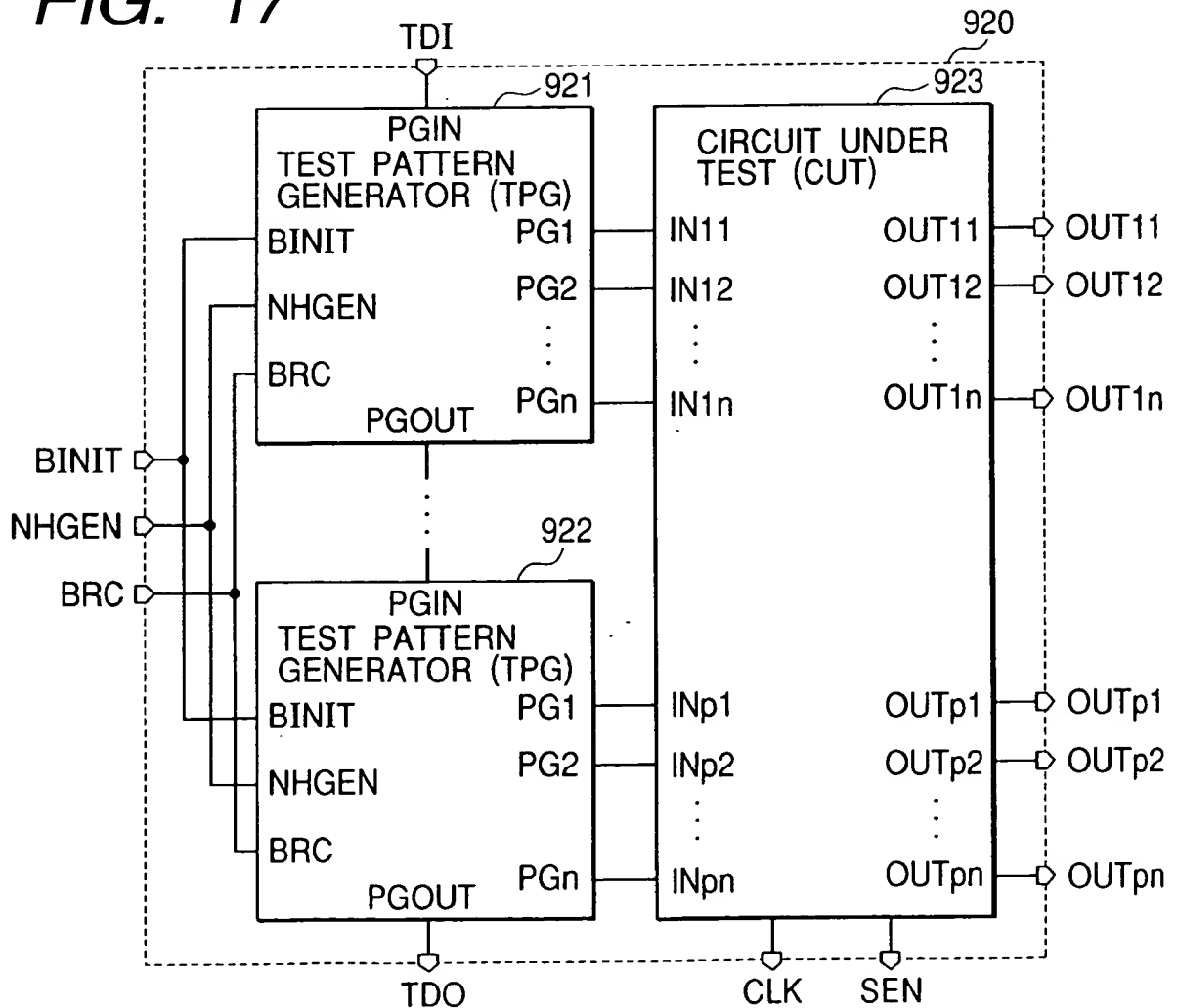


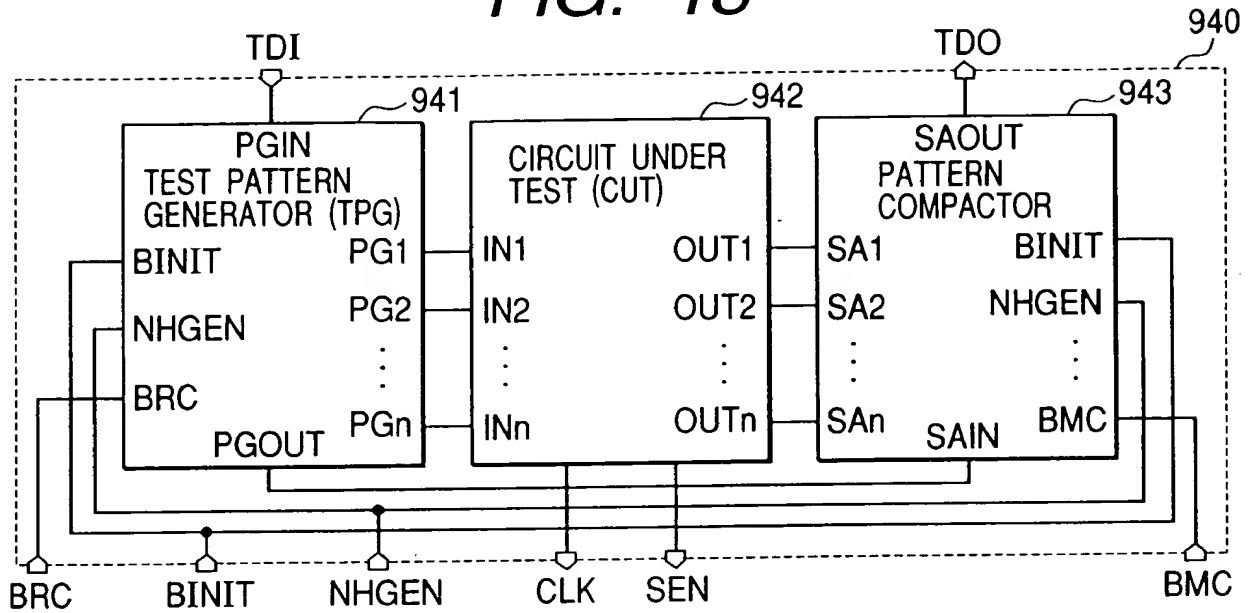
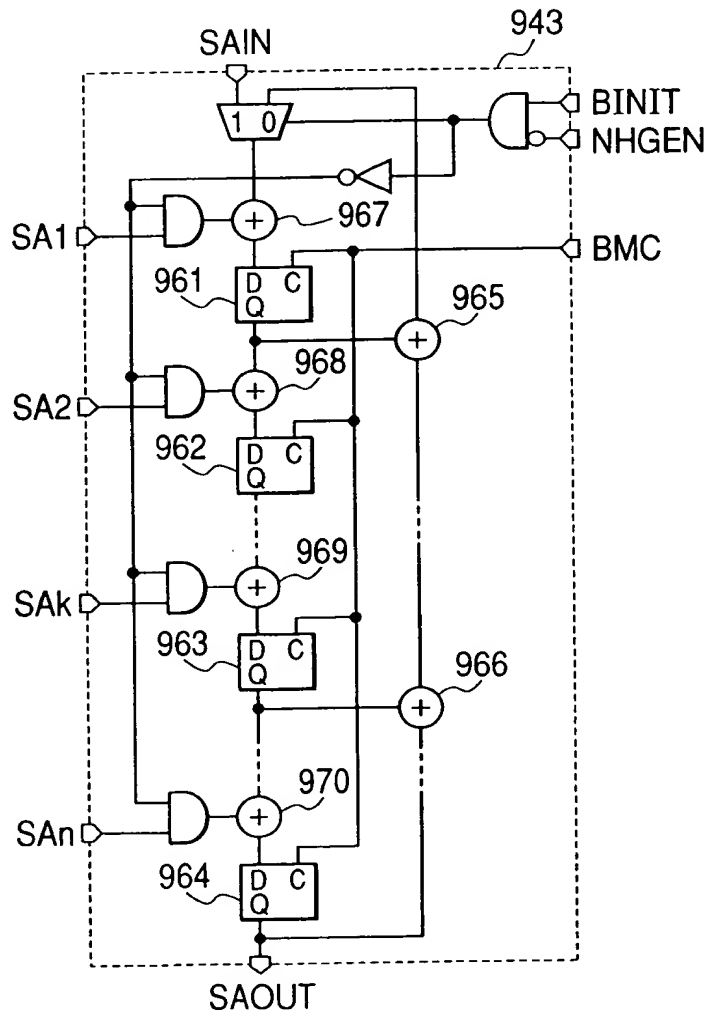
FIG. 18**FIG. 19**

FIG. 20

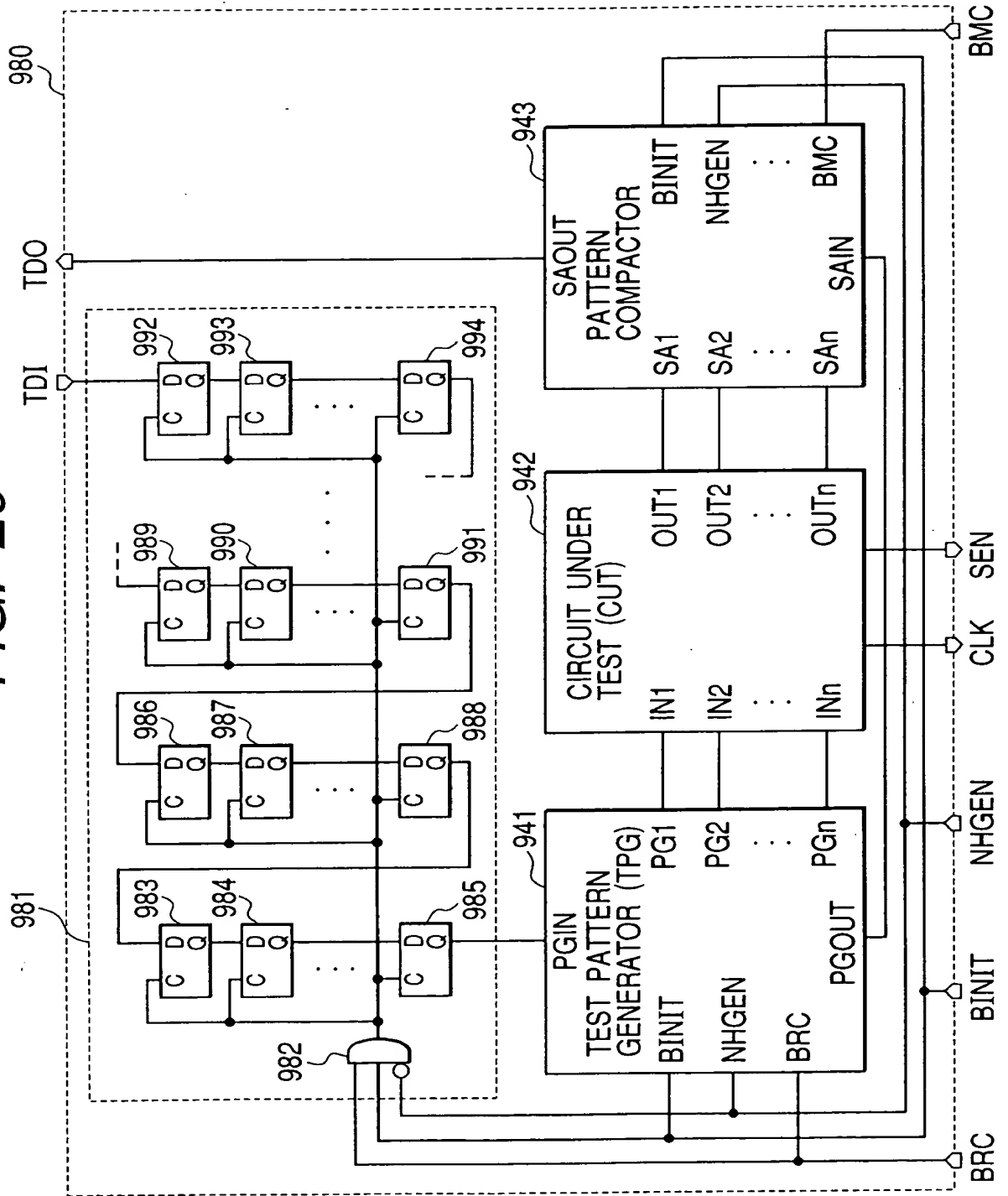


FIG. 21

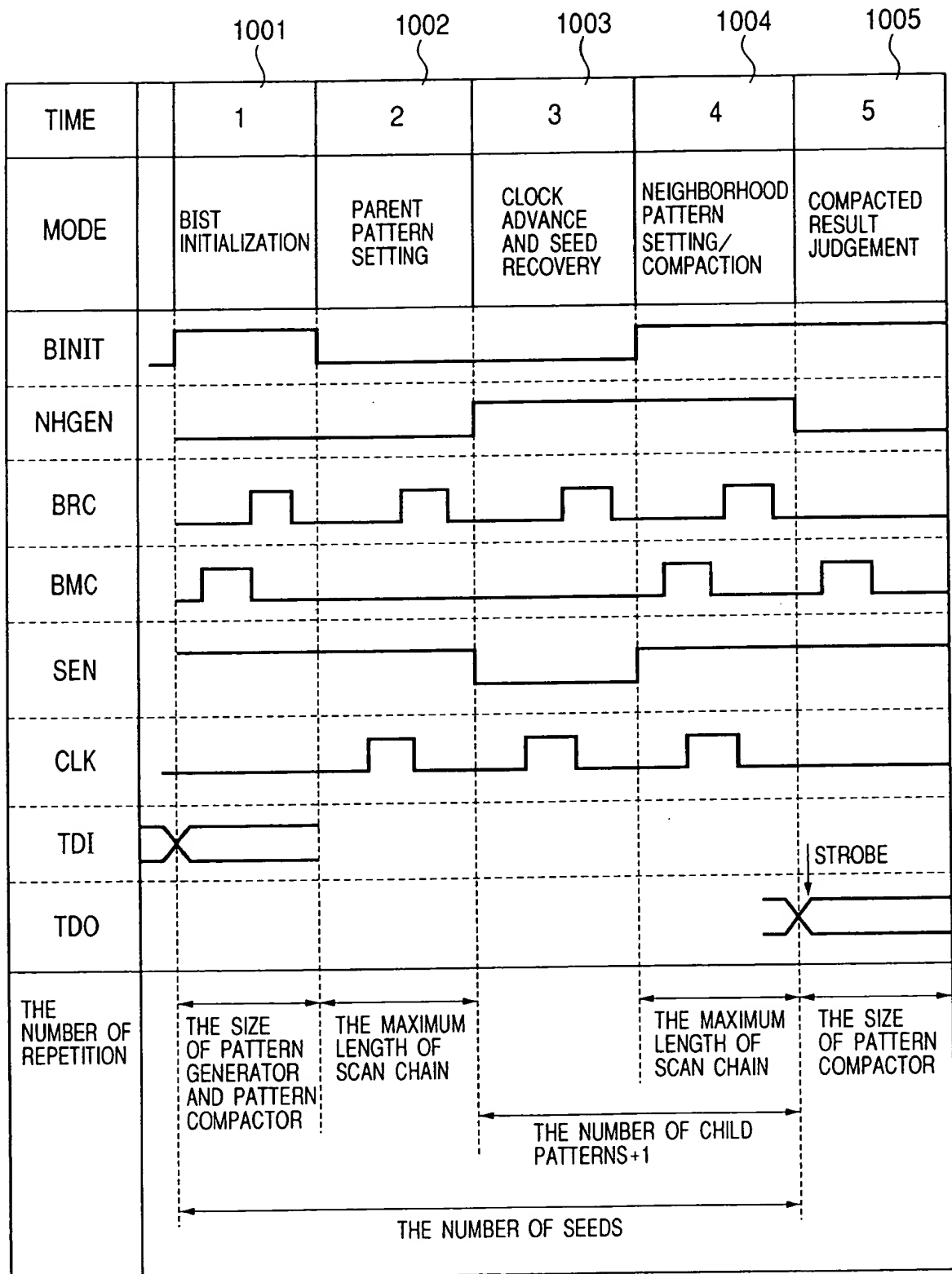
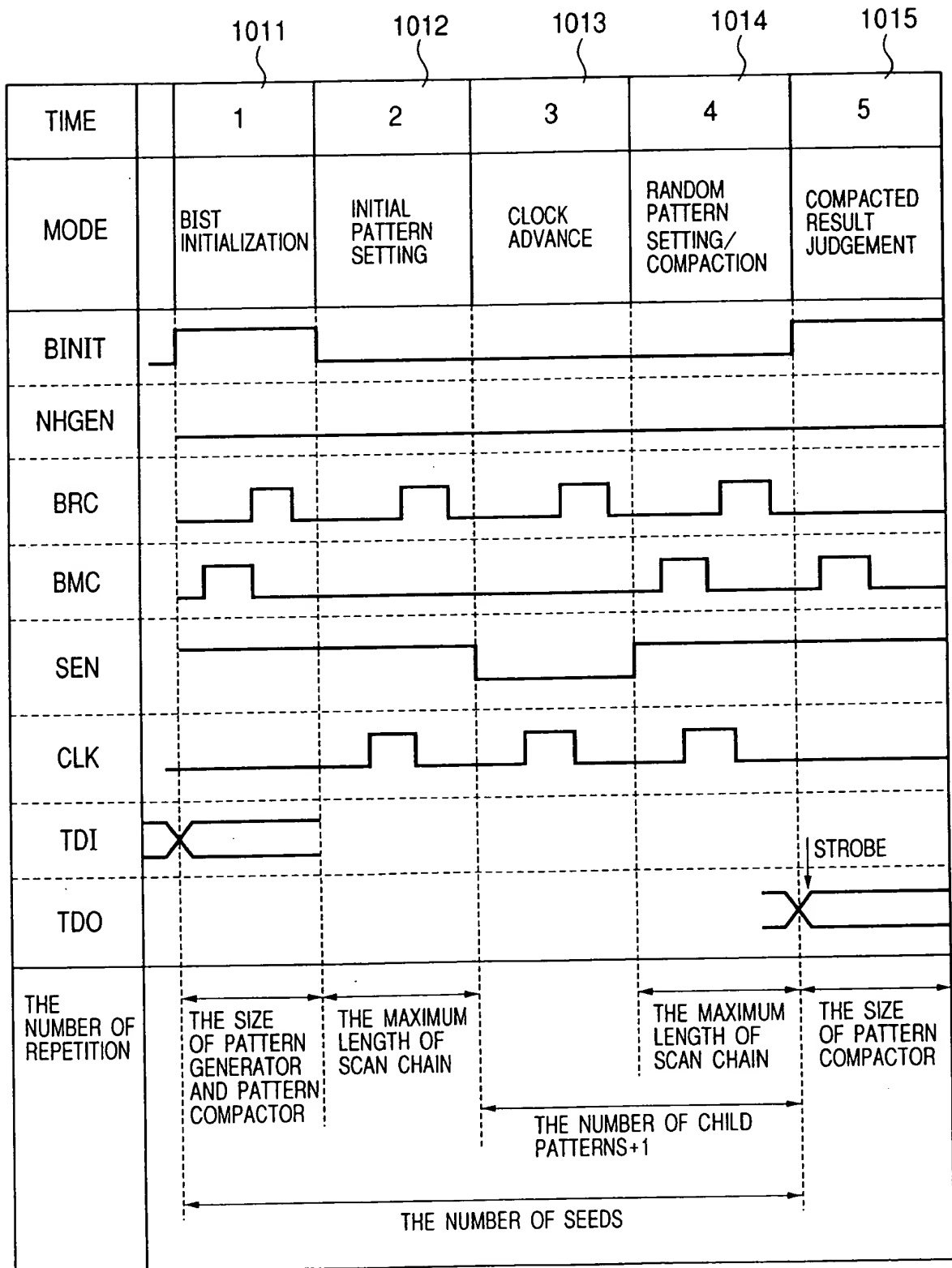


FIG. 22



1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032
------	------	------	------	------	------	------	------	------	------	------	------

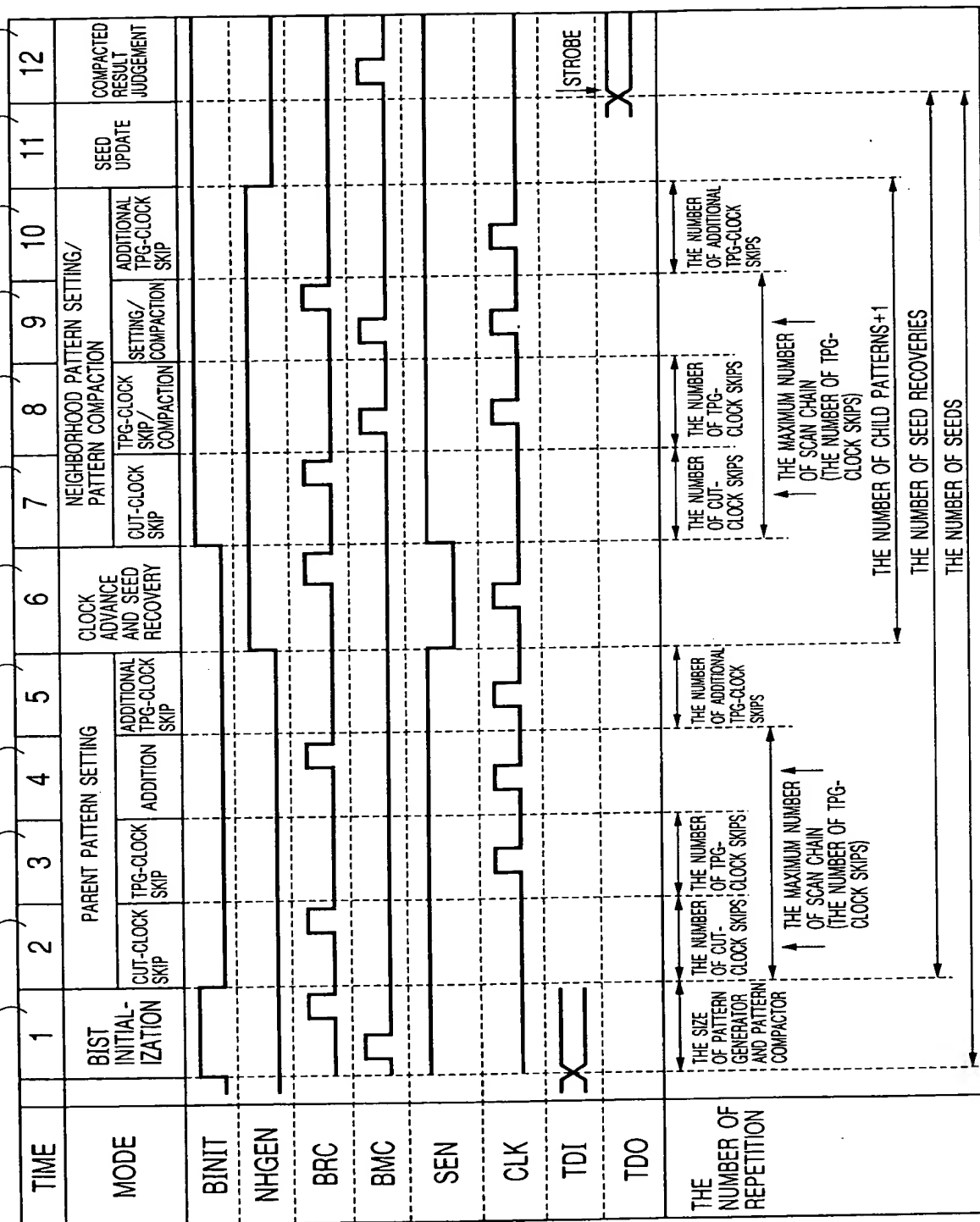


FIG. 24

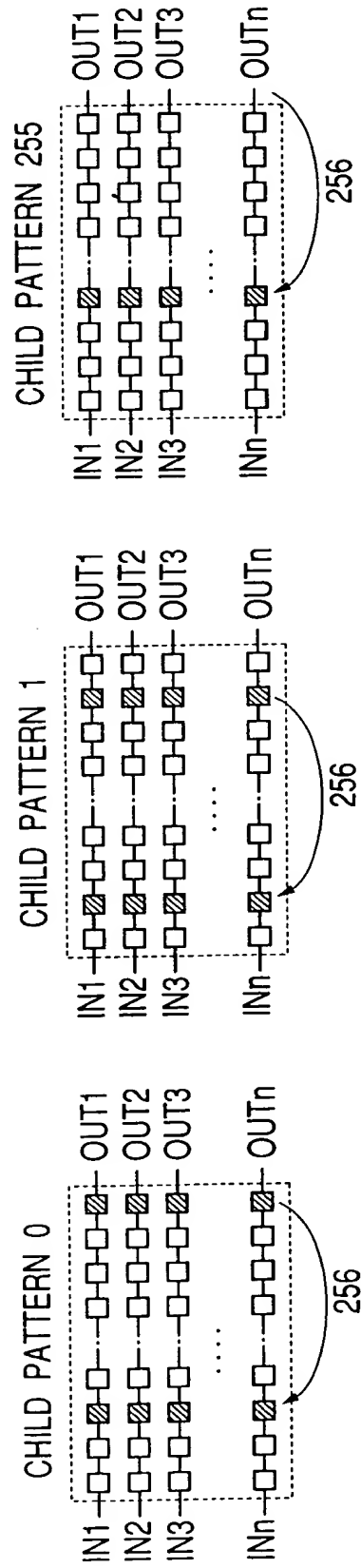


FIG. 25

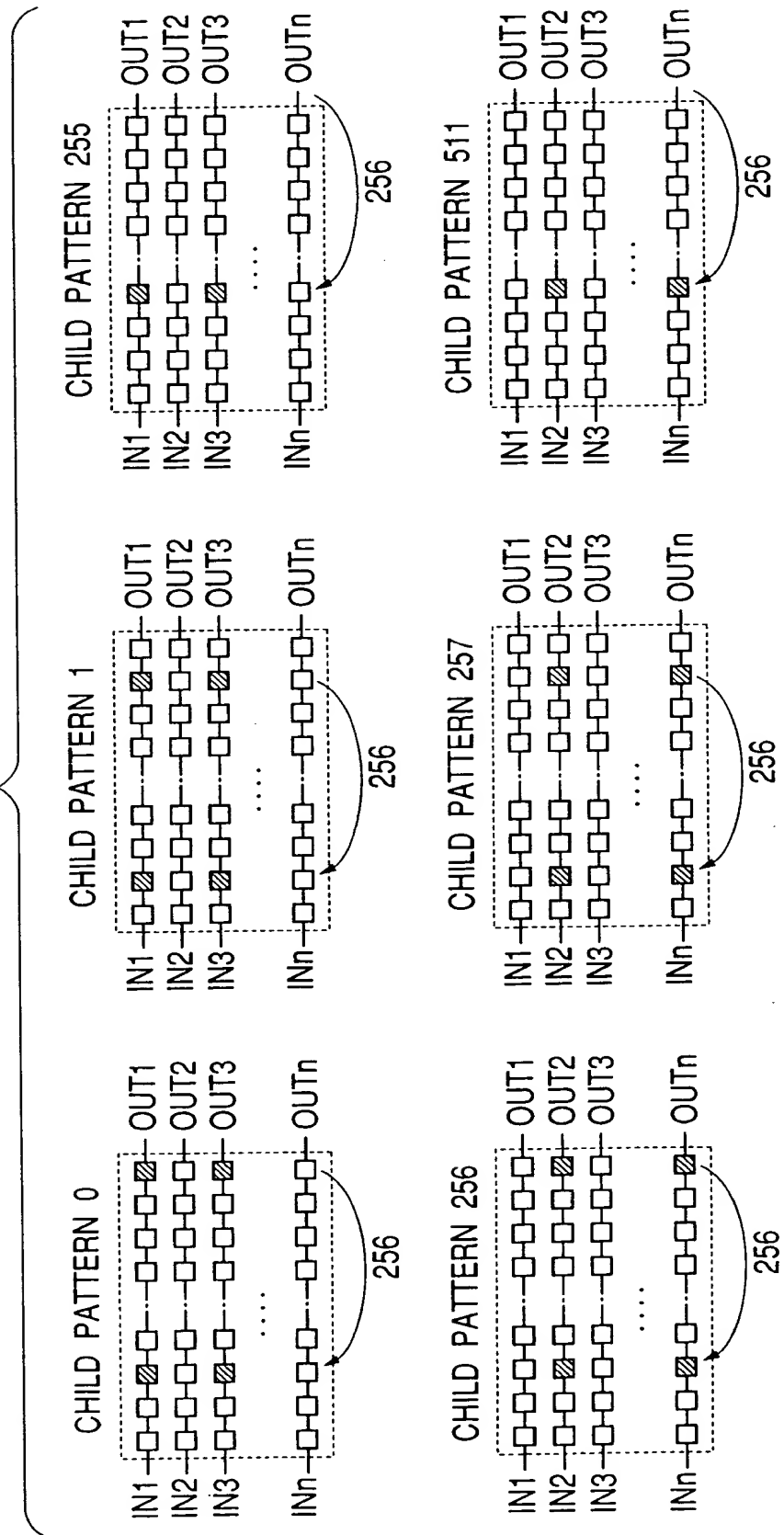


FIG. 26

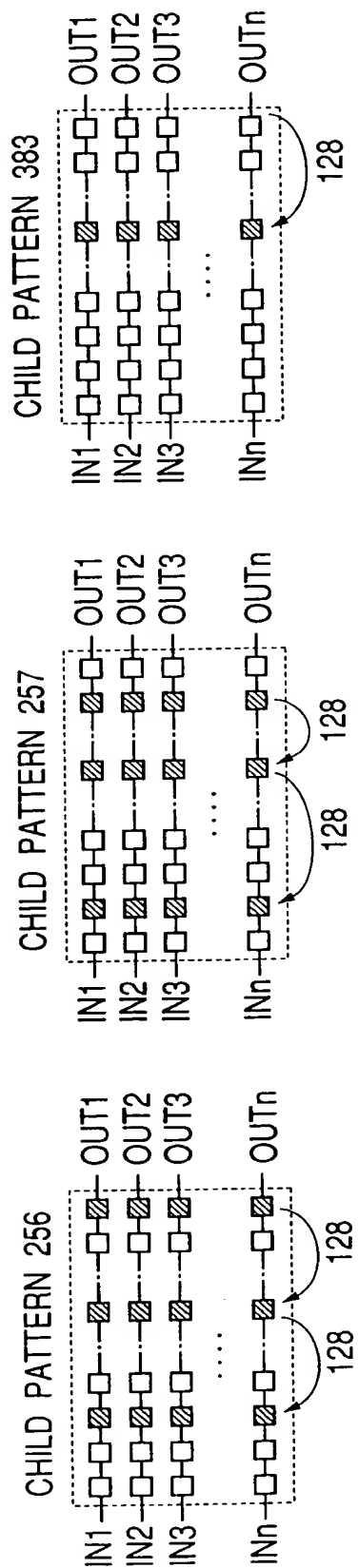


FIG. 27

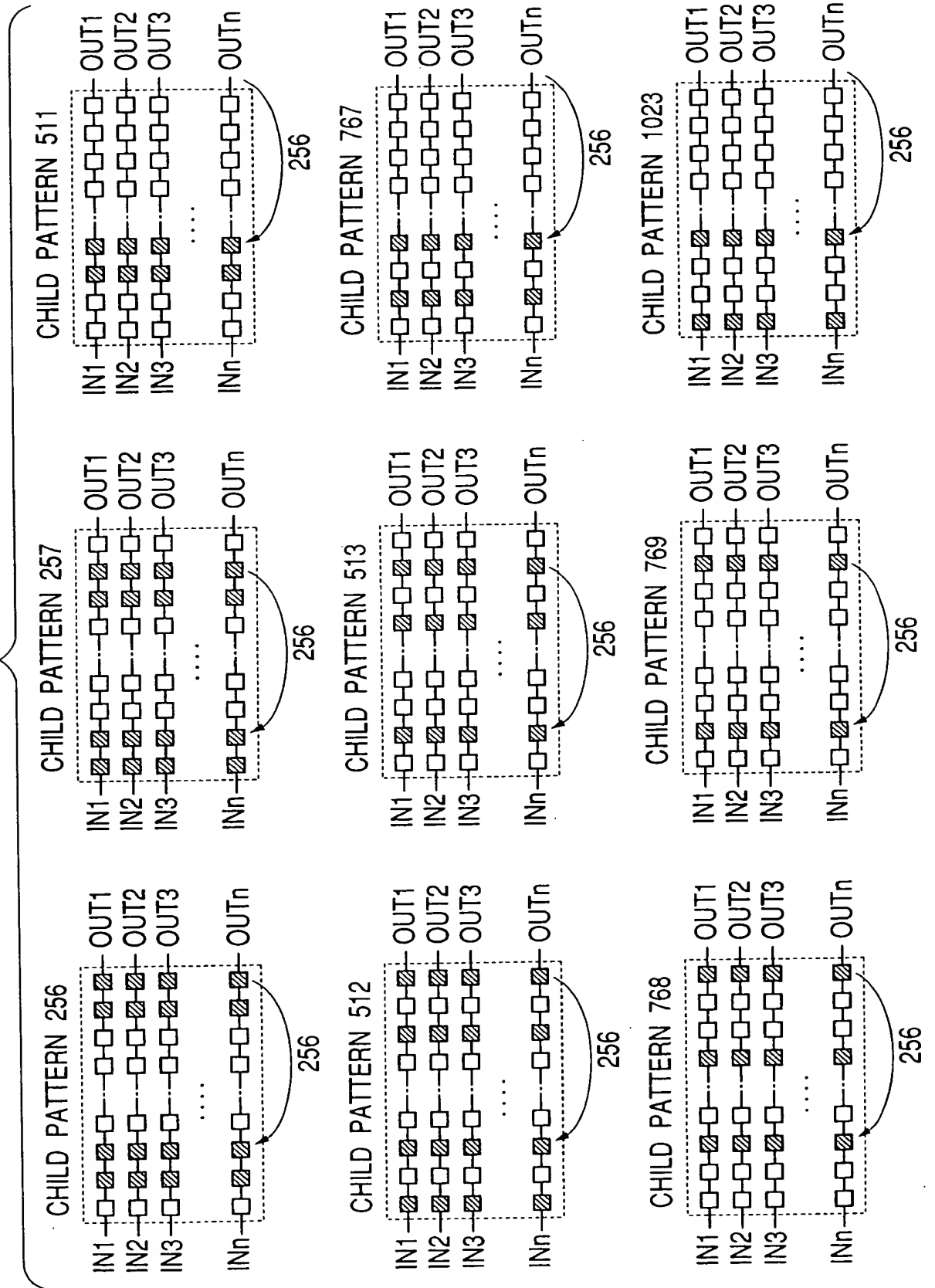


FIG. 28(b)

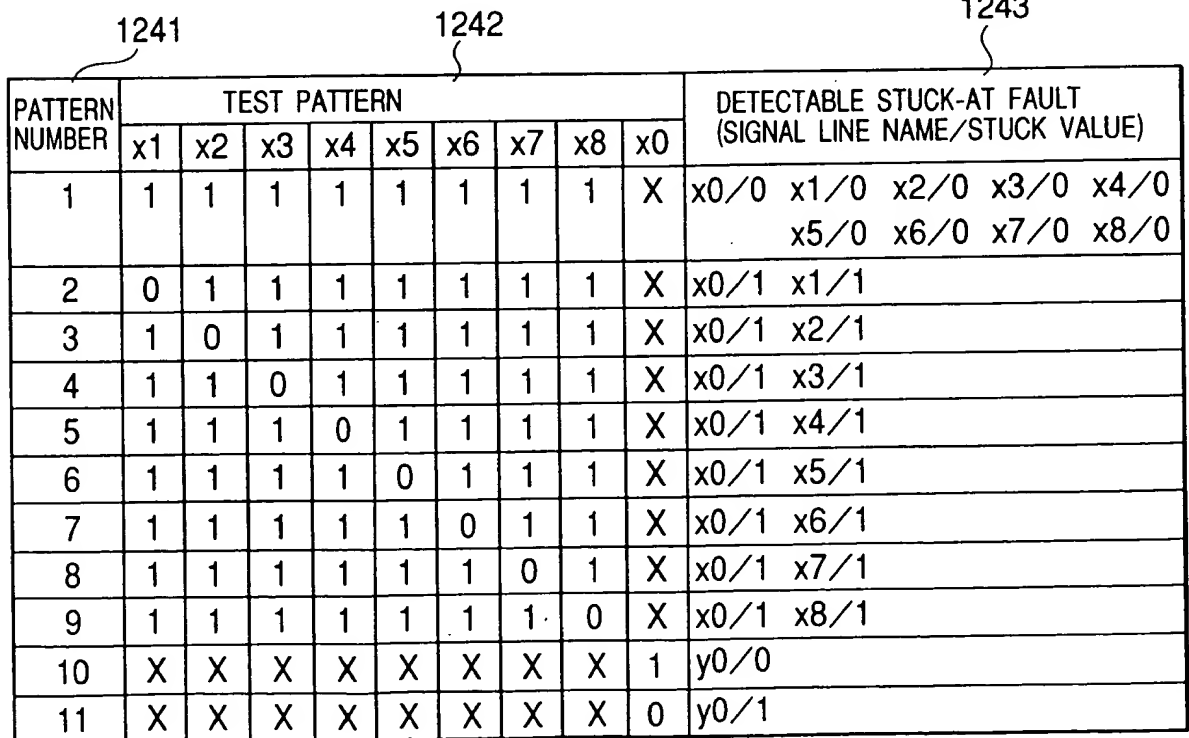
[illegible]

FIG. 29

TIME	MODE	BI NIT	NH GEN	BRC	SEN	CLK	TDI	FBI EN	PG1	PG2	PG3	PG4	LC1	LC2	LC3	HC1	HC2	HC3
0	INITIALIZATION	0	0	0	1	0	1	X	X	X	X	X	X	X	X	X	X	X
1		1	0	P	1	0	1	1	X	X	X	X	X	X	X	X	X	X
2		1	0	P	1	0	1	1	1	X	X	X	X	X	X	X	X	X
3		1	0	P	1	0	0	1	1	1	X	X	X	X	X	X	X	X
4		1	0	P	1	0	0	0	1	1	1	X	X	X	X	X	X	X
5		1	0	P	1	0	0	0	0	1	1	1	X	X	X	X	X	X
6		1	0	P	1	0	1	0	0	0	1	1	1	X	X	X	X	X
7		1	0	P	1	0	1	1	0	0	0	0	1	1	1	X	X	X
8		1	0	P	1	0	1	1	1	0	0	0	1	1	1	X	X	X
9		1	0	P	1	0	1	1	1	1	0	0	0	1	1	1	X	X
10		1	0	P	1	0	0	1	1	1	1	0	0	0	1	1	1	X
11		1	0	P	1	0	X	0	1	1	1	1	0	0	0	1	1	1
12	PARENT PATTERN SETTING	0	0	P	1	P	X	0	1	1	1	1	1	0	0	1	1	1
13		0	0	P	1	P	X	0	1	1	1	1	0	1	0	1	1	1
14		0	0	P	1	P	X	0	1	1	1	1	1	1	0	1	1	1
15		0	0	P	1	P	X	0	1	1	1	1	0	0	1	1	1	1
16		0	0	P	1	P	X	0	1	1	1	1	1	0	1	1	1	1
17		0	0	P	1	P	X	0	1	1	1	1	0	1	1	1	1	1
18		0	0	P	1	P	X	0	1	1	1	1	1	1	1	1	1	1
19		0	0	P	1	P	X	0	1	1	1	1	0	0	0	1	1	1
20	CLOCK ADVANCE	0	1	P	0	P	X	0	1	1	1	1	0	0	0	0	0	0
21	CHILD PATTERN 0 SETTING (RESULT OF PARENT PATTERN)	1	1	P	1	P	X	0	1	1	1	1	1	0	0	0	0	0
22		1	1	P	1	P	X	0	1	1	1	1	0	1	0	0	0	0
23		1	1	P	1	P	X	0	1	1	1	1	1	1	0	0	0	0
24		1	1	P	1	P	X	0	1	1	1	1	0	0	1	0	0	0
25		1	1	P	1	P	X	0	1	1	1	1	1	0	1	0	0	0
26		1	1	P	1	P	X	0	1	1	1	1	0	1	1	0	0	0
27		1	1	P	1	P	X	0	1	1	1	1	1	1	1	0	0	0
28		1	1	P	1	P	X	0	1	1	1	1	0	0	0	0	0	0
29	CLOCK ADVANCE	0	1	P	1	P	X	0	1	1	1	1	0	0	0	1	0	0
30	CHILD PATTERN 1 SETTING (RESULT OF CHILD PATTERN 0)	1	1	P	1	P	X	0	1	1	1	1	1	0	0	1	0	0
31		1	1	P	1	P	X	0	1	1	1	1	0	1	0	1	0	0
32		1	1	P	1	P	X	0	1	1	1	1	1	1	0	1	0	0
33		1	1	P	1	P	X	0	1	1	1	1	0	0	1	1	0	0
34		1	1	P	1	P	X	0	1	1	1	1	1	0	1	1	0	0
35		1	1	P	1	P	X	0	1	1	1	1	0	1	1	1	0	0
36		1	1	P	1	P	X	0	1	1	1	1	1	1	1	1	0	0
37		1	1	P	1	P	X	0	1	1	1	1	0	0	0	1	0	0
38	CLOCK ADVANCE	0	1	P	1	P	X	0	1	1	1	1	0	0	0	0	1	0
83	CLOCK ADVANCE	0	1	P	1	P	X	0	1	1	1	1	0	0	0	1	1	1
84	CHILD PATTERN 7 SETTING (RESULT OF CHILD PATTERN 6)	1	1	P	1	P	X	0	1	1	1	1	1	0	0	1	1	1
85		1	1	P	1	P	X	0	1	1	1	1	0	1	0	1	1	1
86		1	1	P	1	P	X	0	1	1	1	1	1	1	0	1	1	1
87		1	1	P	1	P	X	0	1	1	1	1	0	0	1	1	1	1
88		1	1	P	1	P	X	0	1	1	1	1	1	0	1	1	1	1
89		1	1	P	1	P	X	0	1	1	1	1	0	1	1	1	1	1
90		1	1	P	1	P	X	0	1	1	1	1	1	1	1	1	1	1
91		1	1	P	1	P	X	0	1	1	1	1	0	0	0	1	1	1
92	CLOCK ADVANCE	0	1	P	1	P	X	0	1	1	1	1	0	0	0	0	0	0
93	RESULT OF CHILD PATTERN	1	1	P	1	P	X	0	1	1	1	1	1	0	0	0	0	0
94		1	1	P	1	P	X	0	1	1	1	1	0	1	0	0	0	0
95		1	1	P	1	P	X	0	1	1	1	1	1	1	0	0	0	0
96		1	1	P	1	P	X	0	1	1	1	1	0	0	1	0	0	0
97		1	1	P	1	P	X	0	1	1	1	1	1	0	1	0	0	0
98		1	1	P	1	P	X	0	1	1	1	1	0	1	1	0	0	0
99		1	1	P	1	P	X	0	1	1	1	1	1	1	1	0	0	0
100		1	1	P	1	P	X	0	1	1	1	1	1	1	1	0	0	0

FIG. 30

TIME	MODE	y0	x1	x2	x3	x4	x5	x6	x7	x8	o1	o2
0	INITIALIZATION	X	X	X	X	X	X	X	X	X	X	X
1		X	X	X	X	X	X	X	X	X	X	X
2		X	X	X	X	X	X	X	X	X	X	X
3		X	X	X	X	X	X	X	X	X	X	X
4		X	X	X	X	X	X	X	X	X	X	X
5		X	X	X	X	X	X	X	X	X	X	X
6		X	X	X	X	X	X	X	X	X	X	X
7		X	X	X	X	X	X	X	X	X	X	X
8		X	X	X	X	X	X	X	X	X	X	X
9		X	X	X	X	X	X	X	X	X	X	X
10		X	X	X	X	X	X	X	X	X	X	X
11		X	X	X	X	X	X	X	X	X	X	X
12	PARENT PATTERN SETTING	1	1	X	X	X	X	X	X	X	X	X
13		1	1	1	X	X	X	X	X	X	1	X
14		1	1	1	1	X	X	X	X	X	1	X
15		1	1	1	1	1	X	X	X	X	1	X
16		1	1	1	1	1	1	X	X	X	1	X
17		1	1	1	1	1	1	1	X	X	1	X
18		1	1	1	1	1	1	1	1	X	1	X
19		1	1	1	1	1	1	1	1	1	1	X
20	CLOCK ADVANCE	1	1	1	1	1	1	1	1	1	1	X
21	CHILD PATTERN 0 SETTING (RESULT OF PARENT PATTERN)	0	0	1	1	1	1	1	1	1	1	1
22		1	1	0	1	1	1	1	1	1	0	1
23		1	1	1	0	1	1	1	1	1	1	1
24		1	1	1	1	0	1	1	1	1	1	1
25		1	1	1	1	1	0	1	1	1	1	1
26		1	1	1	1	1	1	0	1	1	1	1
27		1	1	1	1	1	1	1	0	1	1	1
28		1	1	1	1	1	1	1	1	0	1	1
29	CLOCK ADVANCE	0	1	1	1	1	1	1	1	1	1	1
30	CHILD PATTERN 1 SETTING (RESULT OF CHILD PATTERN 0)	1	1	1	1	1	1	1	1	1	0	1
31		0	0	1	1	1	1	1	1	1	1	1
32		1	1	0	1	1	1	1	1	1	1	1
33		1	1	1	0	1	1	1	1	1	1	1
34		1	1	1	1	0	1	1	1	1	1	1
35		1	1	1	1	1	0	1	1	1	1	1
36		1	1	1	1	1	1	0	1	1	1	1
37		1	1	1	1	1	1	1	0	1	1	1
38	CLOCK ADVANCE	0	1	1	1	1	1	1	1	1	1	1
83	CLOCK ADVANCE	0	1	1	1	1	1	1	1	1	1	1
84	CHILD PATTERN 7 SETTING (RESULT OF CHILD PATTERN 6)	1	1	1	1	1	1	1	1	1	0	1
85		1	1	1	1	1	1	1	1	1	1	1
86		1	1	1	1	1	1	1	1	1	1	1
87		1	1	1	1	1	1	1	1	1	1	1
88		1	1	1	1	1	1	1	1	1	1	1
89		1	1	1	1	1	1	1	1	1	1	1
90		1	1	1	1	1	1	1	1	1	1	1
91		0	0	1	1	1	1	1	1	1	1	1
92	CLOCK ADVANCE	0	0	0	0	0	0	0	0	0	1	1
93	RESULT OF CHILD PATTERN	0	0	0	0	0	0	0	0	0	0	0
94		1	1	0	0	0	0	0	0	0	1	0
95		1	1	1	0	0	0	0	0	0	1	0
96		1	1	1	1	0	0	0	0	0	1	0
97		1	1	1	1	1	0	0	0	0	1	0
98		1	1	1	1	1	1	0	0	0	1	0
99		1	1	1	1	1	1	1	0	0	1	0
100		1	1	1	1	1	1	1	1	0	1	0

FIG. 31(a)

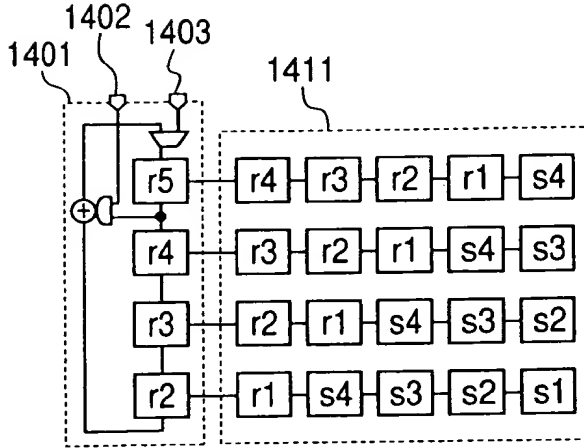


FIG. 31(b)

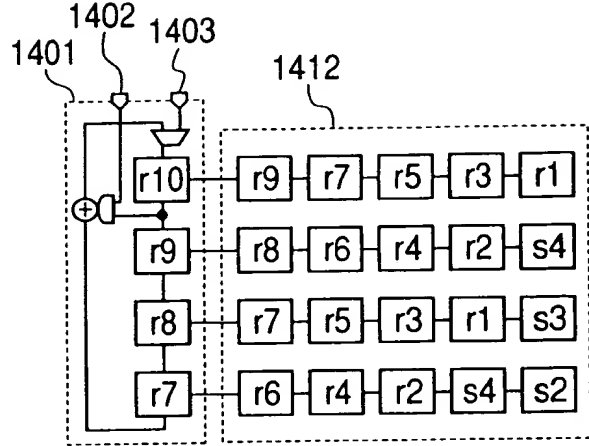


FIG. 31(c)

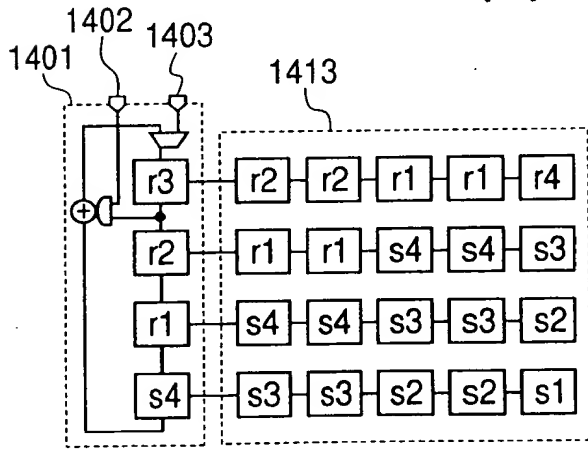


FIG. 31(d)

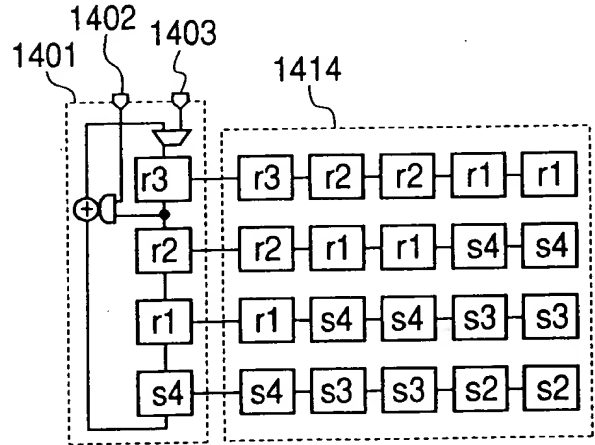


FIG. 31(e)

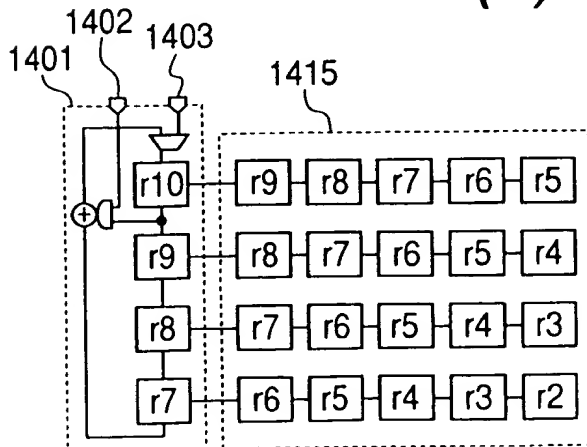


FIG. 32(a)

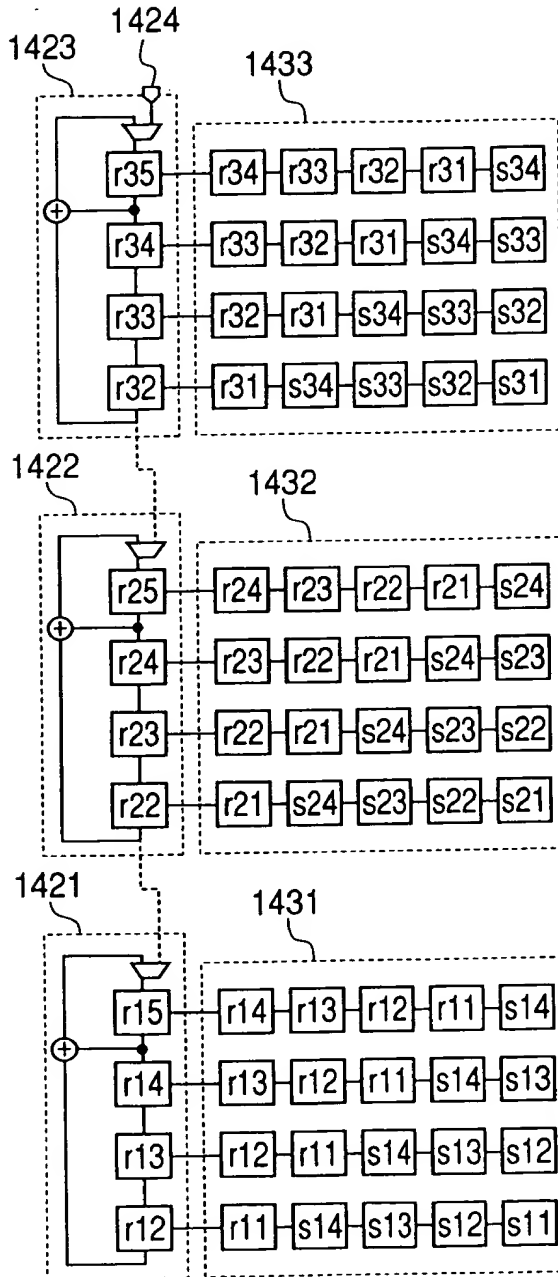


FIG. 32(b)

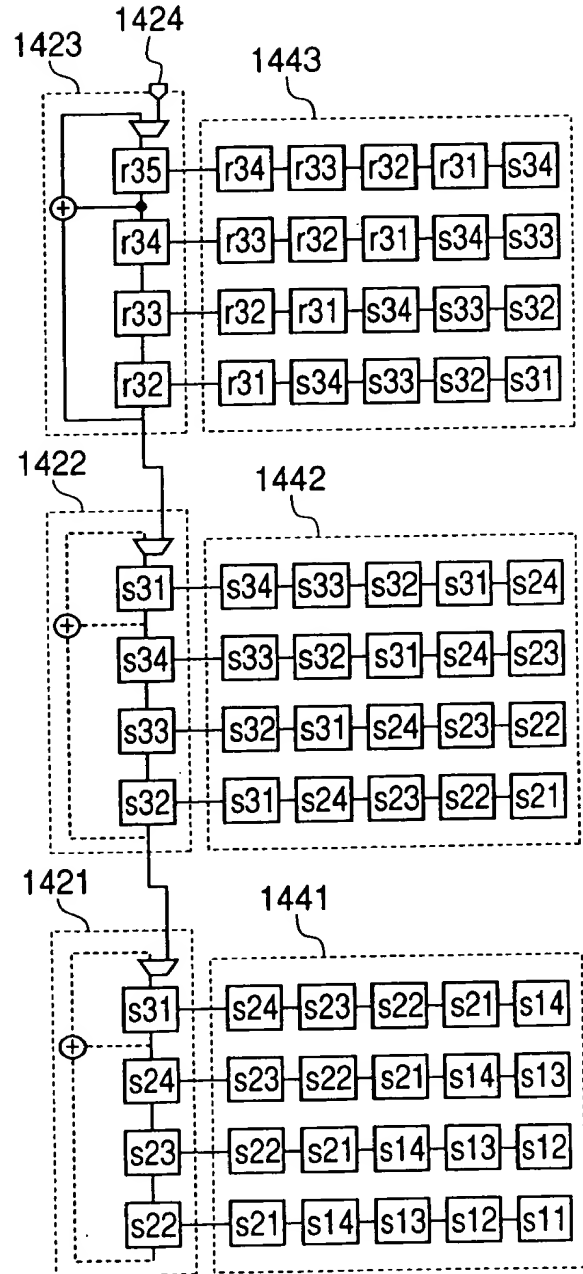


FIG. 33

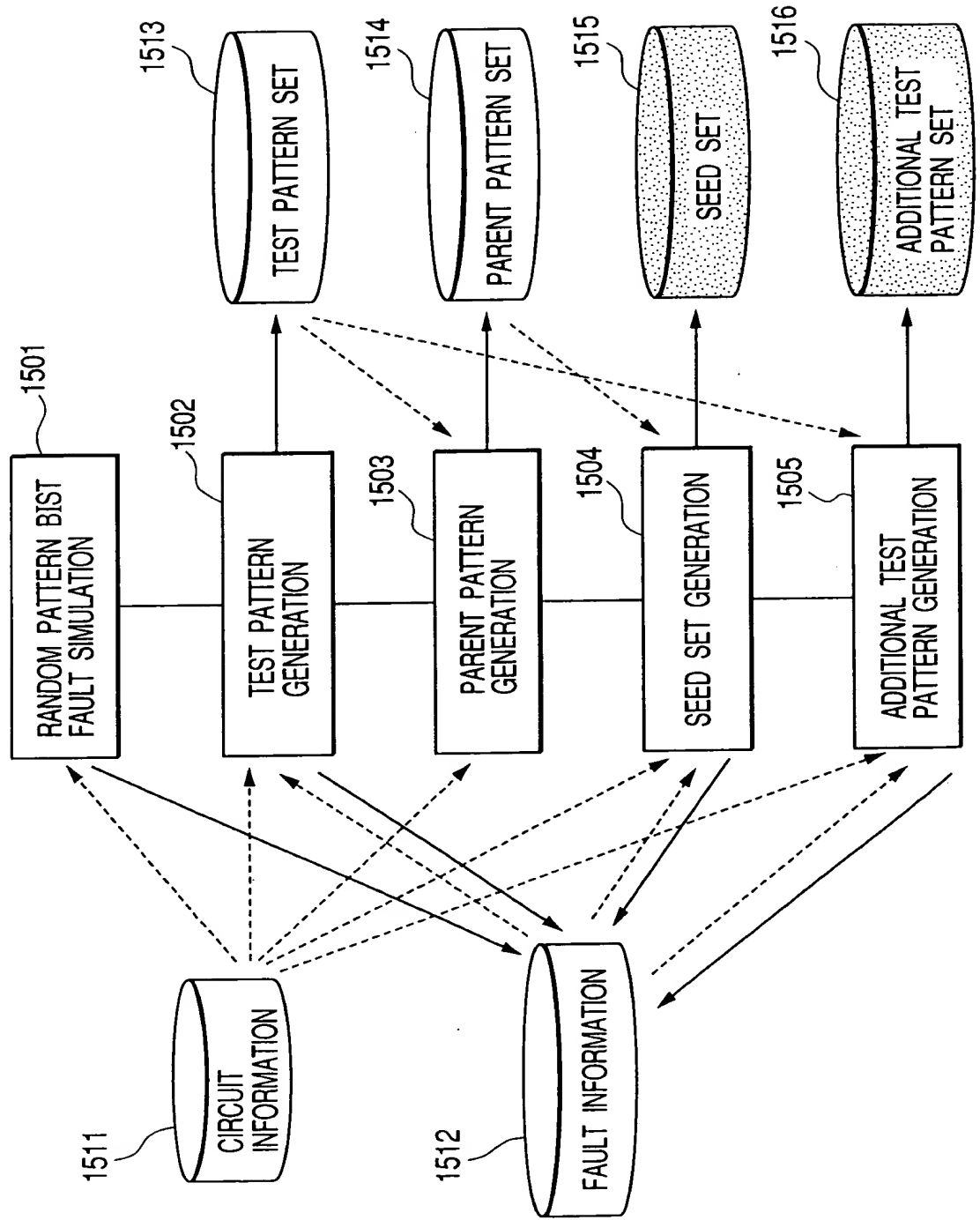


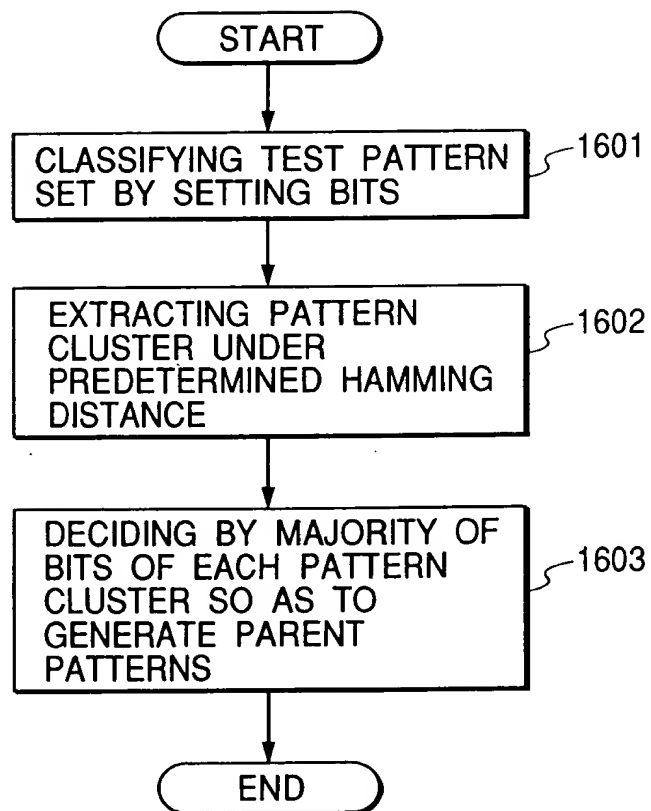
FIG. 34

FIG. 35

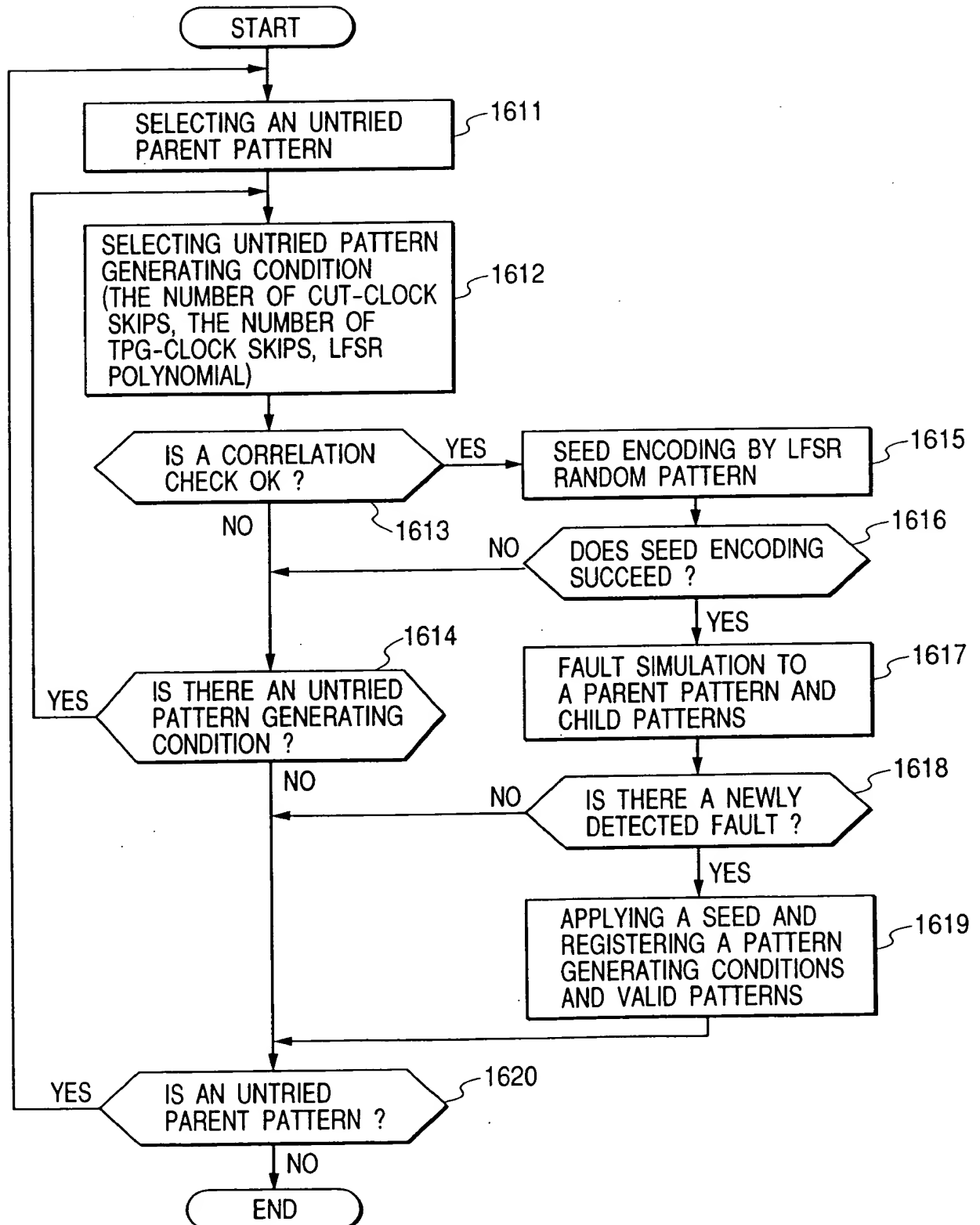


FIG. 36

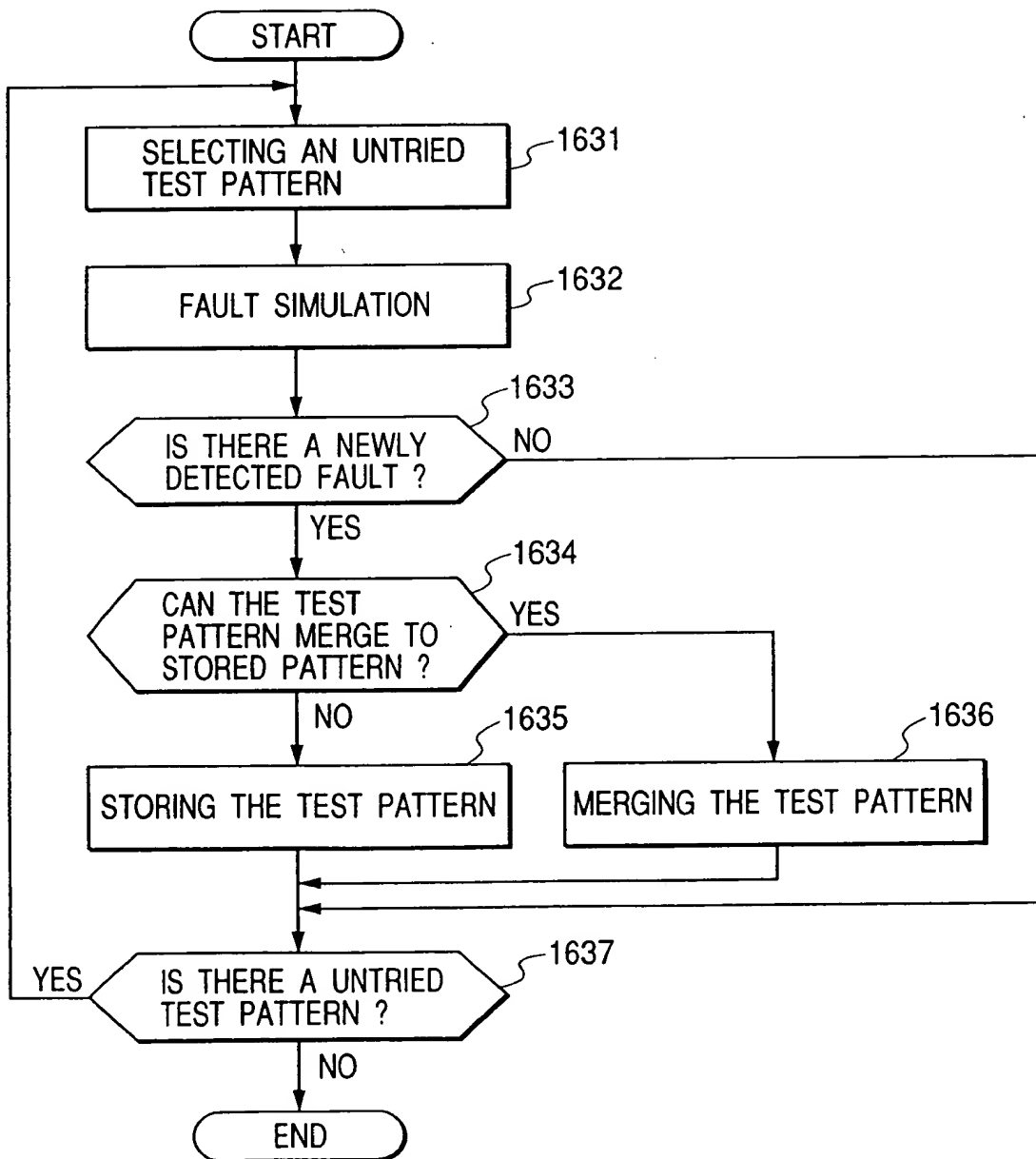


FIG. 37

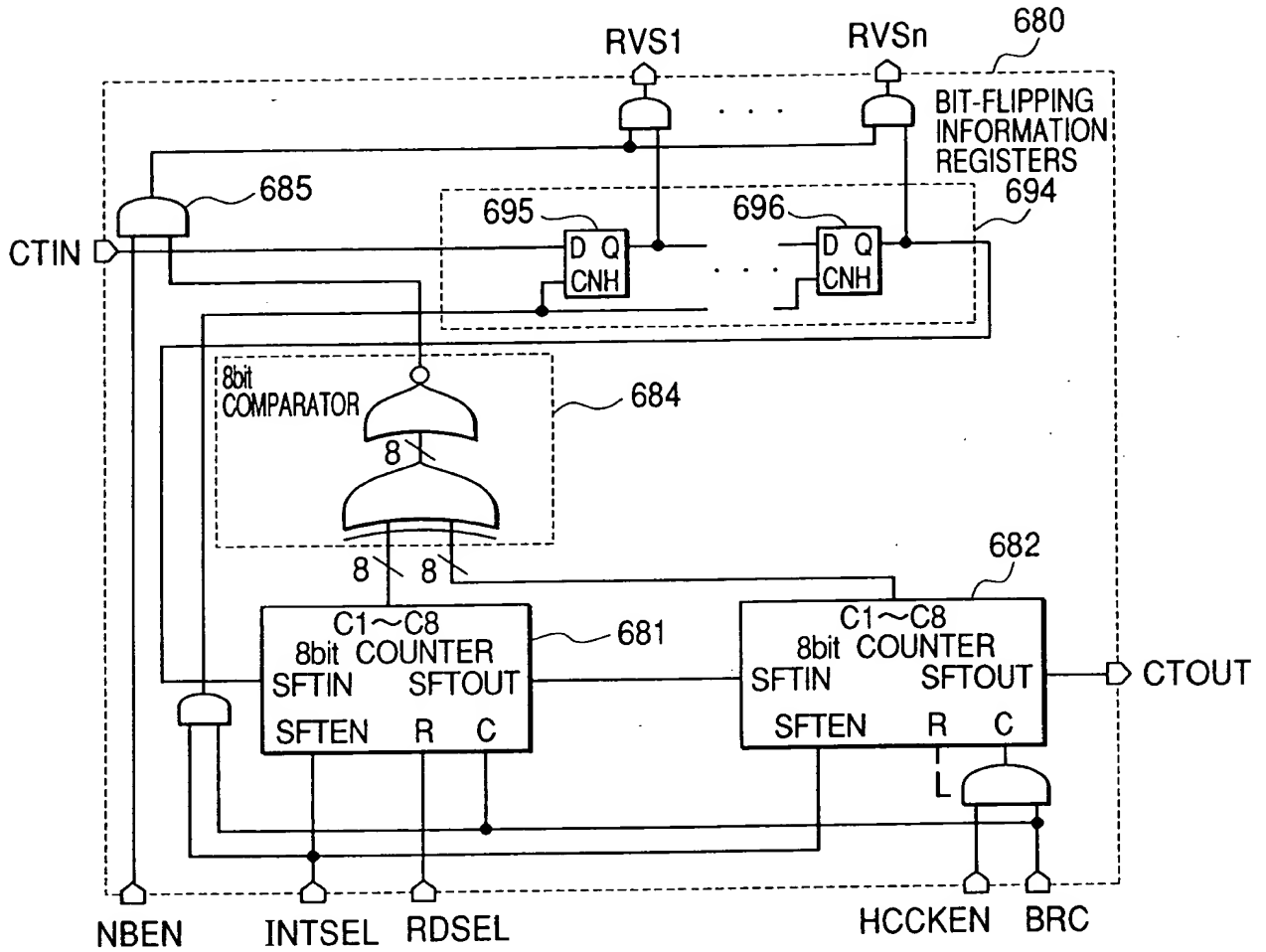


FIG. 38

